

Comparing Functions

Name: _____
Date: _____ Period: _____

8.F2: Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions).

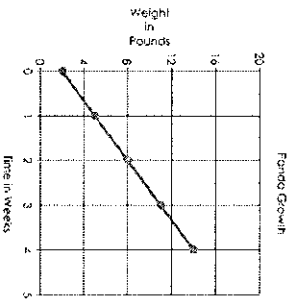
Read each situation, then answer the questions by analyzing and comparing the different linear situations.

1. The Metropolis Zoo recently celebrated the birth of two new baby pandas!

Mochi the panda cub has been measured and weighed each week since she was born.

Weeks	Weight
0	1
1	5
2	9
3	13

Mochi's brother is Kappa. His weight has been charted on the graph below.



- Which panda was heavier when they were born?
- Which panda is growing faster?
- Which panda will weigh more at five weeks?

2. Two contestants on Biggest Loser are Valerie and Oscar. Their weight loss progress is shown below.

Valerie's weight loss is shown by this function, where W is her weight in pounds and t is the time in weeks.

$$W = 235 - 2.5t$$

Oscar's weight loss is tracked in the table below.

Weeks	0	2	5	6
Weight	247	243	237	235

- Who weighed more at the beginning of the show?
- Who is losing weight faster?

-Jessica Wilkerson 2013-

3. Mr. Rich recently planted a crop of money trees in his garden.

A. The first tree was five inches tall when planted. It has grown four inches every month since being planted.

B. Measurements were taken of the second tree and given below:

Months	0	2	3	5
Height	3	12	16.5	25.5

C.

- Which of the trees is growing the fastest?
- Which tree was the tallest when it was first planted?
- Challenge: Which tree is the tallest after 6 months?

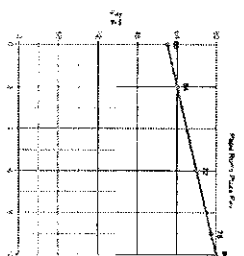
4. Tony is the best pizza deliveryman in the city. He has been offered jobs by all the best pizza places.

Bonhomme's Pizza is offering \$56 per shift and \$2.50 in commission for each pizza delivered.

Little Squeezer's showed Tony a table of salaries.

Pizzas	0	2	4	10
Salary	48	54	60	78

Papa Ron's made their offer in the form of this graph.



Pizza Tent has given Tony his pay options in the following function. S represents Tony's salary, and p represents the number of pizzas he delivers.

$$S = 2.75p + 52$$

- Which company pays the best pay per shift?
- Which company pays the most per pizza?
- Challenge: If Tony is going to deliver at least 20 pizzas every night, which company should he work for?

-Jessica Wilkerson 2013-